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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/924,580	08/09/2001	Yoshihiro Itou		2307

24956 7590 05/20/2004

MATTINGLY, STANGER & MALUR, P.C.  
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EXAMINER

DAS, CHAMELI

ART UNIT PAPER NUMBER

2122

DATE MAILED: 05/20/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

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## Office Action Summary

Application No.

09/924,580

Applicant(s)

ITOU ET AL.

Examiner

C.DAS

Art Unit

2122

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 09 August 2001.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 18-20 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 18-20 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date <u>5/12/04</u> . | 6) <input type="checkbox"/> Other: _____  |

**DETAILED ACTION**

1. This action is in response to the preliminary amendment filed on 8/9/01.
2. Claims 1-17 have been canceled.
3. Claims 18-20 have been added.
4. Claims 18-20 are pending.

***Specification***

5. The abstract of the disclosure is objected to because the abstract contains more than 150 words. Correction is required. See MPEP § 608.01(b).

***Claim Rejections - 35 USC § 112***

6. Claims 18 and 19 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Regarding claim 18, limitation "deleting a barrier instruction when between parallel processing execution division, no dependency exists between a variable or array reference to be referenced and a following reference" is unclear because there is no specific condition has stated that when the barrier instruction would be deleted. The examiner interpreted the claim limitation as "deleting a barrier instruction between parallel processing execution division, when no dependency exists between a variable or array reference to be referenced and a following reference".

Similarly, regarding claim 19, limitation, "deleting a barrier instruction when between parallel processing execution divisions, a dependency exists between a

variable or array reference to be referenced and a following reference" in unclear because there is no specific condition has stated that when the barrier instruction would be deleted. The examiner interpreted the claim limitation as "deleting a barrier between parallel processing execution divisions instruction when a dependency exists between a variable or array reference to be reference and a following reference".

### ***Double Patenting***

7. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. See *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and, *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent is shown to be commonly owned with this application. See 37 CFR 1.130(b).

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

8. Claims 18-20 are rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims (1,2), (1,3) and (1,4) respectively of U.S. Patent No. 6,292,939.

Although the conflicting claims are not identical, they are not patentably distinct from each other because they are obvious variation of each other.

**Conclusion**

9. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

TITLE: Dynamic load balancing among processors in a parallel computer, US 6292822 B1

TITLE: Emulated branch effected by trampoline mechanism, US 6505296 B2

TITLE: Method and compiler for rearranging array data into sub-arrays of consecutively-addressed elements for distribution processing, US 6681388 B1

TITLE: Method and system for anticipatory optimization of computer programs, US 6314562 B1

TITLE: Nested parallel language preprocessor for converting parallel language programs into sequential code, US 6106575 A

TITLE: A Graph Based Approach to Barrier Synchronization Minimisation, author: Stohr et al, ACM, July 1997.

TITLE: Optimizing Parallel Programs with Explicit Synchronization, author: Krishnamurthy et al, ACM, 1995.

10. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Chameli Das whose telephone number is 703-305-1339.

The examiner can normally be reached on Monday-Friday from 7:00 A.M. to 3:30 P.M.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor Tuan Dam can be reached at 703-305-4552. The fax number for this group is (703) 872-9306.

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An inquiry of general nature or relating to the status of this application or proceeding should be directed to the group receptionist whose telephone number is 703-305-9600.

*Chameli C. Das*

**CHAMELI C. DAS  
PRIMARY EXAMINER**

*5/12/04*